



Comparison of animated jet stream visualizations

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The visualization of 3D atmospheric phenomena in space and time is still a challenging problem. In particular, multiple solutions of animated jet stream visualizations have been produced in recent years, which were designed to visually analyze and communicate the jet and related impacts on weather circulation patterns and extreme weather events.

This PICO integrates popular and new jet animation solutions and inter-compares them. The applied techniques (e.g. stream lines or line integral convolution) and parametrizations (color mapping, line lengths) are discussed with respect to visualization quality criteria and their suitability for certain visualization tasks (e.g. jet patterns and jet anomaly analysis, communicating its relevance for climate change).